AMENDMENTS TO THE ABSTRACT AND SPECIFICATION

Please amend the ABSTRACT according to the following:

Disclosed herein is a method for producing a lithium composite oxide for use as a positive electrode active material for lithium secondary batteries by a spray pyrolysis process. The method comprises the steps of: subjecting an ~~organic~~ inorganic acid salt solution of metal elements constituting a final composite oxide other than lithium to a spray pyrolysis process to obtain an intermediate composite oxide powder; and solid state-mixing the intermediate composite oxide powder and ~~an organic acid~~ a hydroxide salt of lithium, followed by thermally treating the mixture.

Please amend paragraph [0014] according to the following:

[0014] subjecting an ~~organic~~ inorganic acid salt solution of metal elements constituting a final composite oxide other than lithium to a spray pyrolysis process to obtain an intermediate composite oxide powder; and

Please amend paragraph [0015] according to the following:

[0015] solid state-mixing the intermediate composite oxide powder and ~~an organic acid~~ a hydroxide salt of lithium, followed by thermally treating the mixture.

Please amend paragraph [0017] according to the following:

[0017] The ~~organic~~ inorganic acid salt solution includes at least one metal element selected from the group consisting of Al, Co, Cr, Fe, Mn, Ni, Mg, Cu and Sb, and preferably Co, Mn and Ni.

Please amend paragraph [0018] according to the following:

[0018] In a particular embodiment of the present invention, the ~~organic~~ inorganic acid salt solution is a mixed solution of $Mn(NO_3)_2.4H_2O$ and $Ni(NO_3)_2.6H_2O$. The intermediate composite oxide formed from the mixed solution is an oxide represented by $(Ni_{1/2}Mn_{.1/2})O_{2+y}$. The final lithium composite oxide is an oxide represented by $Li_{1+x}(Ni_{1/2}Mn_{1/2})O_2$ (wherein $0 \leq x \leq 0.1$).

Please amend paragraph [0019] according to the following:

[0019] In another particular embodiment of the present invention, the ~~organic~~ inorganic acid salt solution is a mixed solution of $Ni(NO_3)_2.6H_2O$, $Co(NO_3)_2.6H_2O$ and $Mn(NO_3)_2.4H_2O$. The intermediate composite oxide formed from the mixed solution is an oxide represented by $(Ni_{1/3}Co_{1/3}Mn_{1/3})O_{2+y}$. The final lithium composite oxide is an oxide represented by $Li_{1+x}(Ni_{1/3}Co_{1/3}Mn_{1/3})O_2$ (wherein $0 \leq x \leq 0.1$). It should be understood that any ~~organic~~ inorganic acid salts capable of producing the positive electrode active materials of $Li_{1+x}(Ni_{1/2}Mn_{1/2})O_2$ and $Li_{1+x}(Ni_{1/3}Co_{1/3}Mn_{1/3})O_2$ can be utilized, in addition to the above ~~organic~~ inorganic acid salts.

Please amend paragraph [0021] according to the following:

[0021] The step of forming the intermediate composite oxide includes the sub-steps of: measuring the amount of ~~organic~~ inorganic acid salts of metal elements constituting the final composite oxide other than lithium in the stoichiometric ratio of the constituent metal elements; dissolving the ~~organic~~ inorganic acid salts in distilled water or alcohol, adding a chelating agent thereto, and stirring the mixture; and spraying the aqueous or alcoholic solution of the ~~organic acid salts~~ stirred mixture to form liquid droplets, and pyrolyzing the liquid droplets at about 400.about.1,000°C., to form the intermediate composite oxide.

Please amend paragraph [0032] according to the following:

[0032] In particular, the present inventors found that when a solution of ~~organic~~ inorganic acid salts, including lithium, in the state of liquid droplets is passed through a furnace at high temperature in accordance with ultrasonic spray pyrolysis, the lithium is easily evaporated due to its low vapor pressure, which causes the following problems: 1) frequent occurrence of intercalation/deintercalation of lithium ions in the crystal structure of a final composite oxide, 2) low thermal hysteresis, 3) deterioration of the crystal growth, and 4) destruction of the crystal structure of a composite oxide as a positive electrode active material according to increasing number of charge-discharge cycles.

Please amend paragraph [0033] according to the following:

[0033] Based on this finding, the present inventors have earnestly and intensively conducted

research to solve the above problems, and as a result, discovered that a lithium composite oxide in which the molar ratio of lithium to other constituent metal elements is stably maintained in the range of 1:1 to 1:1.1, can be produced by subjecting lithium-free ~~organic~~ inorganic acid salts to ultrasonic spray pyrolysis to form an intermediate composite oxide having a homogeneous composition, and subjecting the intermediate composite oxide and ~~an organic acid~~ a hydroxide salt of lithium to a solid-state reaction process.

Please amend paragraph [0060] according to the following:

[0060] More specifically, the method of producing the spinel structured lithium composite oxide may comprises the steps of subjecting an ~~organic~~ inorganic acid salt solution of Mn and at least one metal element selected constituting a final composite oxide other than lithium and Mn to a spray pyrolysis process to obtain an intermediate composite oxide powder and solid state-mixing the intermediate composite oxide powder and ~~an organic acid~~ a hydroxide salt of lithium followed by thermally treating the mixture. The starting ~~organic~~ inorganic acid salt solution may be the mixed solution of manganese nitrate ($Mn(NO_3)$) and at least one of cobalt nitrate, magnesium nitrate, copper nitrate, iron nitrate, chrome nitrate and cobalt nitrate. The final lithium composite oxide may includes $Li_{1.06}Mn_2O_4$, $Li_{1.06}(Ni_{0.5}Mn_{1.5})O_4$, $Li_{1.06}(Mg_{0.5}Mn_{1.5})O_4$, $Li_{1.06}(Fe_{0.5}Mn_{1.5})O_4$, $Li_{1.06}(Cr_{0.5}Mn_{1.5})O_4$ and $Li_{1.06}(Co_{0.5}Mn_{1.5})O_4$.

Please amend paragraph [0061] according to the following:

[0061] As described above, according to the method of the present invention, a lithium composite oxide in which the molar ratio of lithium to other constituent metal elements is stably maintained in the optimum range, can be produced by subjecting lithium-free ~~organic~~ inorganic acid salts to ultrasonic spray pyrolysis to form an intermediate composite oxide having a homogeneous composition, and subjecting the intermediate composite oxide and ~~an organic acid~~ a hydroxide salt of lithium to a solid-state reaction process. The lithium composite oxide thus produced has a stable crystal structure and exhibits a high thermal hysteresis.